

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (currently amended): An oral hygiene product for human and animal use with a melatonin base as an active product to be used ~~a~~ as tooth pastes, mouthwashes or animal feeds, comprising a hydrophilic excipient, a hydrophobic excipient and melatonin in a proportion of 0.1% from more than 2% to 5% of the oral hygiene product by weight.
2. (currently amended): The oral hygiene product according to claim 1, further comprising a colourless, thermostable, non toxic, non volatile, non irritating ~~an~~ active auto-oxidant.
3. (previously presented): The oral hygiene product according to claim 1, further comprising a preservative.
4. (currently amended): The oral hygiene product according to claim 1, wherein the melatonin is a synthetic N-acetyl-5-methoxytryptamine ~~N-acetyl-5-methoxytryptamine~~.
5. (currently amended): The oral hygiene product according to claim 1, further comprising an active auto-oxidant selected from the group consisting of sodium sulphite, sodium bisulfate, ascorbic acid, hydroquinone, nipagin, vitamin E, and vitamin A.
6. (previously presented): The oral hygiene product according to claim 1, further comprising a preservative selected from the group consisting of benzoic acid, salicylic acid, sorbic acid, and essential oils.
7. (new) An oral hygiene product for human and animal use with a melatonin base as an active product to be used as tooth pastes, mouthwashes or animal feeds, comprising a hydrophilic excipient, a hydrophobic excipient, melatonin in a proportion of 0.1% to 5%, and a colourless, thermostable, non toxic, non volatile, non irritating active auto-oxidant.

8. (new): An oral hygiene product for human and animal use with a melatonin base as an active product to be used as tooth pastes, mouthwashes or animal feeds, comprising a hydrophilic excipient, a hydrophobic excipient, melatonin in a proportion of 0.1% to 5%, and a preservative selected from the group consisting of benzoic acid, salicylic acid, sorbic acid, and essential oils.

9. (new): A method of treatment of oral illness, the method comprising administering to a damaged mouth tissue of a human or an animal an oral hygiene product comprising melatonin, a hydrophilic excipient, and a hydrophobic excipient, said melatonin in a proportion of 0.1% to 5% of the oral hygiene product by weight.

10. (new): The method of claim 9, wherein the oral hygiene product further comprises a colourless, thermostable, non toxic, non volatile, non irritating active auto-oxidant.

11. (new): The method of claim 9, wherein the oral hygiene product further comprises a preservative selected from the group consisting of benzoic acid, salicylic acid, sorbic acid, and essential oils.

12. (new): The method of claim 9, wherein said damaged mouth tissue is produced by a pathology or a surgical intervention.